

12462600 COLUMBIA RIVER BELOW ROCK ISLAND DAM, WAUpper Columbia Basin
Upper Columbia-Entiat Subbasin

LOCATION.--Lat 47°19'57", long 120°04'48" referenced to North American Datum of 1927, in NE ¼ NW ¼ sec.9, T.21 N., R.22 E., Douglas County, WA, Hydrologic Unit 17020010, on left bank 1.0 mi downstream from Rock Island Dam, 2.0 mi downstream from Rock Island Creek, 12 mi southeast of Wenatchee, and at mile 452.4.

Auxiliary GAGE: Lat 47 18'15", long 120 05'00", in NE ¼ NW ¼ sec. 21, T. 21 N., R. 22 E., Douglas County, Hydrologic Unit 17020010, on left bank 2.0 mi downstream from the base gage, and at mile 450.4.

DRAINAGE AREA.--89,400 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January to December 1910 (gage heights only), May 1913 to December 1916, October 1930 to current year. Published as "at Wenatchee" January 1910 to December 1916, and as "at Trinidad" October 1930 to May 1961.

GAGE.--Daily discharge determined from flow through turbines plus spillway flow when present. Datum of gage is NGVD of 1929. Prior to Jan. 1, 1916, nonrecording gage 1.2 mi upstream from highway bridge at Wenatchee, at mile 466.3, at datum 583 ft above NGVD of 1929. Jan. 1 to Dec. 31, 1916, nonrecording gage on pier of highway bridge at Wenatchee, at mile 465.1, at datum 579.30 ft above NGVD of 1929. Oct. 1, 1930, to May 31, 1961, water-stage recorder 0.5 mi southwest of Trinidad, at mile 441.7, at datum 499.3 ft above NGVD of 1929 (river-profile survey). June 1, 1961, to July 22, 1988, water-stage recorder at present site and datum; May 21, 1963, to July 22, 1988, auxiliary water-stage recorder 2.0 mi downstream at same datum.

COOPERATION.--Discharge records provided by Public Utility District No. 1 of Chelan County at Rock Island Dam through the Corps of Engineers, North Pacific Division, Reservoir Control Center. The U.S. Geological Survey made 6 discharge measurements at this site during the year.

REMARKS.--Flow regulated by numerous reservoirs. Feeder Canal diversion (station 12435500) for Columbia Basin project is used to irrigate approximately 600,000 acres in the United States. An additional 66,500 acres in Canada are irrigated by other diversions.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--80 years (water years 1914-16, 1931-2007), 118,400 ft³/s, 85,780,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 692,600 ft³/s, June 12, 1948, gage height, 59.35 ft, site and datum then in use; minimum discharge, 4,120 ft³/s, Feb. 10, 1932, gage height, 11.40 ft, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 7, 1894, reached a discharge of about 740,000 ft³/s, from flood-marks at Wenatchee.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 211,000 ft³/s, May 8; minimum daily discharge, 37,500 ft³/s, Sept. 23.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
 [×10⁶, million]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	49,800	93,500	101,000	73,900	109,000	103,000	167,000	163,000	162,000	117,000	145,000	82,200
2	61,700	99,700	105,000	70,200	118,000	129,000	179,000	155,000	156,000	130,000	108,000	69,500
3	85,600	97,500	89,800	90,300	89,900	90,900	194,000	160,000	130,000	109,000	128,000	70,900
4	62,800	59,100	112,000	107,000	70,600	83,400	187,000	180,000	169,000	128,000	122,000	67,600
5	69,800	50,600	117,000	108,000	92,500	95,800	175,000	166,000	183,000	147,000	83,800	78,600
6	64,200	79,200	115,000	98,900	100,000	98,700	155,000	158,000	158,000	127,000	110,000	48,700
7	56,000	108,000	111,000	59,000	124,000	95,800	145,000	188,000	174,000	116,000	119,000	58,000
8	47,300	82,100	118,000	99,500	112,000	111,000	146,000	211,000	194,000	105,000	121,000	57,600
9	90,000	82,800	95,500	107,000	112,000	93,300	141,000	183,000	183,000	138,000	133,000	47,800
10	75,200	101,000	77,500	101,000	112,000	82,700	140,000	168,000	168,000	144,000	127,000	69,000
11	84,100	72,800	105,000	123,000	93,500	66,000	150,000	157,000	180,000	153,000	111,000	67,400
12	73,000	98,700	104,000	126,000	114,000	103,000	149,000	154,000	179,000	157,000	104,000	69,700
13	56,000	102,000	93,300	146,000	112,000	103,000	158,000	165,000	164,000	162,000	138,000	66,300
14	48,900	99,900	88,800	123,000	103,000	113,000	172,000	151,000	168,000	164,000	138,000	66,600
15	44,600	98,000	53,700	141,000	90,600	124,000	141,000	168,000	175,000	146,000	131,000	53,700
16	76,700	88,600	82,500	136,000	58,400	136,000	151,000	170,000	171,000	148,000	89,700	52,700
17	64,800	84,700	91,500	133,000	59,600	119,000	160,000	167,000	143,000	126,000	102,000	61,000
18	73,600	71,600	119,000	134,000	48,100	111,000	158,000	166,000	136,000	132,000	79,900	59,900
19	85,500	54,900	104,000	132,000	78,000	118,000	165,000	150,000	166,000	135,000	59,100	67,600
20	70,300	72,000	110,000	119,000	76,600	147,000	164,000	148,000	164,000	141,000	116,000	55,600
21	52,400	68,100	105,000	113,000	79,800	146,000	154,000	164,000	165,000	132,000	122,000	47,400
22	48,200	82,400	105,000	127,000	64,800	150,000	121,000	172,000	160,000	117,000	116,000	39,000
23	84,000	57,100	80,800	124,000	64,900	159,000	163,000	162,000	133,000	128,000	110,000	37,500
24	80,400	53,300	85,200	129,000	73,800	166,000	160,000	174,000	106,000	138,000	112,000	71,000
25	63,200	79,000	59,100	142,000	59,400	138,000	166,000	167,000	139,000	144,000	82,700	67,000
26	70,900	70,400	79,800	136,000	88,100	146,000	160,000	178,000	138,000	153,000	59,400	65,300
27	58,400	112,000	94,700	137,000	101,000	148,000	160,000	171,000	157,000	145,000	102,000	66,800
28	53,800	117,000	100,000	124,000	84,000	169,000	148,000	172,000	143,000	115,000	102,000	46,800
29	60,600	117,000	92,300	147,000	---	175,000	129,000	177,000	151,000	113,000	112,000	40,000
30	78,600	93,500	73,300	136,000	---	185,000	169,000	174,000	123,000	133,000	128,000	46,900
31	113,000	---	70,000	117,000	---	180,000	---	164,000	---	154,000	123,000	---
Total	2,103,400	2,546,500	2,938,800	3,659,800	2,489,600	3,885,600	4,727,000	5,203,000	4,738,000	4,197,000	3,434,600	1,798,100
Mean	67,850	84,880	94,800	118,100	88,910	125,300	157,600	167,800	157,900	135,400	110,800	59,940
Max	113,000	117,000	119,000	147,000	124,000	185,000	194,000	211,000	194,000	164,000	145,000	82,200
Min	44,600	50,600	53,700	59,000	48,100	66,000	121,000	148,000	106,000	105,000	59,100	37,500
Ac-ft	4,172,000	5,051,000	5,829,000	7,259,000	4,938,000	7,707,000	9,376,000	10.32×10 ⁶	9,398,000	8,325,000	6,813,000	3,567,000

	Calendar Year 2006	Water Year 2007
Total	41,413,300	41,721,400
Mean	113,500	114,300
Max	249,000	211,000
Min	40,200	37,500
Ac-ft	82,140,000	82,750,000

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